MANET
Draft Charter Update/Plans

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WG History

- What has happened in years past?
  - Explored a broad range of MANET problems, performance issues, and related candidate protocols
  - Recent decision to work several WG documents to EXP RFC stage

- Present Lessons
  - Better understanding of taxonomies
  - Better understanding of design components and tradeoffs
  - Some pragmatic solutions available and some EXPERIMENTAL specification maturity
  - There is no one size fits all, but we can likely design 1-2 protocols to meet many application scenario needs.

- Where are we going?
  - GOAL: Achieve a smaller set of consensus-based design(s)
  - Standards Track Specification Efforts
  - Other Informationals Documents

Present Status

- 4 Protocols that have received or are receiving EXP RFC status review
  - RFC 3561- AODV
  - RFC 3626 - OLSR
  - RFC 3684 - TBRPF
  - DSR (Pending has undergone author revision)

- Rough Taxonomy Split
  (2) Reactive and (2) Proactive

- Undergoing planning and next phase of work
  - Reduce and focus on a small number of standard track efforts
  - Reviewed new charter update and problem statement

Specific Next Step:
WG Draft Charter Update

- List reviewed (posted May 12)
- Mostly positive feedback
- Chairs would like more feedback this week
- A few questions on side items but core items seemed to have rough consensus
- Requested AD consider update after WG review completed

WG Purpose

- To standardize IP routing protocol functionality suitable for wireless routing application within both static and dynamic topologies
- Routing problems
  - unique wireless routing interface characteristics
  - increased temporal dynamics, due to motion or other factors

WG Focus

- Primary focus is to address manet use as a routing technology extension at the edges of an IP infrastructure

- Support for deployment of hybrid infrastructures
  - Mixture of fixed (e.g., grid) and mobile nodes
  - Support for local non-routing nodes

- Fundamental goal: improved operational IP routing performance for dynamic, wireless routing regions

Planned Standards Track Efforts

- MANET Reactive Routing Protocol (MRRP)

- MANET Proactive Routing Protocol (MPRP)

    - As this progresses the WG may consider integrated reactive/proactive approaches

Generic Flooding Work

- Common ALL_MANET_NODES forwarding protocol building block

- Present MANET work has developed a number of flooding optimizations that can reduce significantly the number of redundant transmissions

- Goal: A generic MANET flooding building block
  - general use for scoped best effort forwarding
  - can be adapted to a routing protocol instantiations

Other Work Areas
(e.g., Informational Docs, etc)

- How do we use MANETs?
  - Best Practices Documentation
  - Applicability Documents
  - Security Aproaches
  - Internet Interconnection Approaches
    - Addressing/Auto-configuration
    - Discovery
  - IPv4/v6 Specifics

OSPF-MANET Update

- Recent history
  - Discussed across groups for several IETF meetings, where to work effort and scope
- Recently formed design team
- To be worked within OSPF WG
  - Some manet support,involvement, and interaction
  - Not replacing manet proactive effort